December 13, 2010

Via ECFS
Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: *Written Ex Parte Presentation*
ET Docket Nos. 09-191 and WC Docket No. 07-52

Dear Ms. Dortch:

Western WiMAX, LLC submits this presentation in the Open Internet proceeding for two reasons. First, Western WiMAX urges the FCC to be mindful that rules that it adopts in the Open Internet proceeding should not require Internet Services Providers (ISPs) to alter the Internet traffic prioritization choices of users, particularly in light of the established standard-based prioritization schedule of certain types of services transmitted over the Internet and on private networks. Second, any "reasonable network management" rules the FCC may adopt should account for the unique characteristics – especially bandwidth constraints – of fixed wireless broadband and should not take steps to undermine the ability of WISPs and others to provide service.

Western WiMAX provides fixed wireless broadband service in and around the Phoenix, Arizona market. Our company has been in business for 10 years and was an early entrant in the marketplace for fixed wireless broadband services. We provide service to approximately 100 businesses and approximately 700 residential subscribers, using a combination of 18 GHz, 23 GHz, 38 GHz and 3.65 GHz solutions, with both licensed and unlicensed components. Our business depends on providing reliable broadband (data), voice and video services to these customers and to fulfill their needs in delivering content of their choice quickly and dependably. Clearly, then, the FCC's proposed rules in the Open Internet proceeding could have a dramatic impact on Western WiMAX's business and its customers.

If the FCC intends to adopt rules that would prevent an ISP from prioritizing Internet traffic, such rules should account for existing IEEE and IETF governing standards and priorities for different classes of service. Briefly stated, all Internet traffic is tagged with specific Differentiated Service Code Point (DSCP) names that determine how such traffic is to be handled by the network operators (wireless ISP in this case). As established in protocol documents RFC2474 and RFC2475, telephony and certain video traffic is given the highest priority. As an example, in the case of Voice over IP, its priority marking is by default called "EF" for Expedited Forwarding. This is a standard derived by the RFC(s) and set forth in software and products delivered by equipment manufacturers.

Not by network providers. By determining the kind of content being generated or received, the customer's IP connected device most often sets the priority, *not* the ISP – **the ISP simply honors the prioritization schedule if requested by the customer**. This appears to be a substantial misconception in the industry. Most often, providers *do not* reclassify packet priorities on flowing traffic because it is so system intensive by nature. Rather, providers "allocate" an acceptable amount of their limited resources (bandwidth) to a given application. The allocation of limited resources in itself, should not necessarily be perceived as a mechanism of prioritization because in fact, all consumer traffic is then "created equal" within those given resources. Resources then become a function of system architecture and available financial budget.

Western WiMAX is concerned that if the FCC eliminates the ability to enforce DSCP bits in packet headers, then ISPs would be forced to ignore the prioritization schedule, thus providing no clear differentiation of services and create an "all traffic created equal" scenario. For services such as VoIP, this could have dire consequences – companies like Western WiMAX would no longer be able to assure their customers that VoIP would be given the highest priority across the Western network. The collateral damage from such a regulatory regime would be significant to not only wired and wireless ISPs but a host of other evolving advanced technologies that currently, or will, rely on guaranteed and predictable performance. This is not to mention the potential damage to an entire "eco-system" of industry partners that has sprung up around these advanced technologies.

Further, Western WiMAX believes that fixed wireless providers should not be regulated in the same manner as other fixed providers (e.g., DSL, cable modem, fiber) are because fixed wireless networks have limited bandwidth to work with, often forcing providers to take more active steps to managing Internet traffic. As consumers download more and more bandwidth-intensive content and applications, our network will become even more strained. Simply put, we do not have the bandwidth flexibility that wired providers have to meet rigid network management rules. Western WiMax believes that any rules governing a fixed wireless broadband provider's network management practices should be similar to those the FCC may impose on mobile wireless providers.

Western WiMAX supports the positions taken by WISPA, the Wireless Internet Service Providers Association in their Ex Parte presentation filed on December 10, 2010. We ask the Commission to accept these recommendations in any rules it adopts in this proceeding.

Sincerely,

/s/ Timothy Shea
Timothy Shea
Western WiMAX, LLC